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JMB-6-6

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Memo

QC

Quality Control

												DQA:	Date	e: _	<u>~</u>
NCR: Y	'es	/ No				WORK ORDER NON-	-CO	NFOR	MANCE / UP	DATE					•
									=			QA Closed:	Date	e:	
Work Orde	ır.					DISPOSITION				AGAINST	DE	PARTMENT,	/PROCESS		
Work Orde	-					Rework			Skid-tube	Crosstube]	Water Jet		Engineering
Part N	lo.					Scrap			Machining	Small Fab		Pro	d. Eng. Coor.		Quality
						Use-as-is	_	Thern	noforming	Finishing	$\overline{}$	Rec/Sto	re/Packaging	_	Other
NCR N	lo					Work Order Update			Large Fab	Composite			Supplier		
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Cause		Date	Step	Qty		or Non-conformance	Cł	nief Eng	Desc	ription		Date :	Verification		QC Inspector
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Equip/Tooling	_												<u> </u>		
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-	—-	Cracks	<i>^ ·</i>		-	Broken/Damaged	-	-	on Incomplete		-	Part Incorre	<u> </u>		Weld
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		Heat Trea		-	<u> </u>	Countersink	-	Mislabe			<u> </u>	Positioned V			,
-		•	n Strip in	lube	-	Cut Too Short	-	Misread	1			Power Loss/	Surge [Other
i i	- [1	Ripples in	Bend		i	Drill Holes	- [Offset							

Out of Calibration

Out of Sequence

Outside Dimensions

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

Vork Orde ovember-15-12		98		*931	98*								Page	2
evision ID:	646.3716 Gauge Bracket			Accept	*N9	റററ	4 0	100)* s	etup :	Start Stop	171.	S1* S2*	and the second s
tart Date: equired Date: eference:		Start Qty: 20.00 Req'd Qty: 20.00	*20* *20*		I .	Item ID: omer:								
pprovals:		:				Date:		-	R		Start Stop	1/1	R1*	
equence ID/ /ork Center II 30 5130*	D	Operation Description QC8- Inspect parts - seco		Set Up/ Run Hours 0.00 15)	ol ID T	ool#	Plan Code	Accept Qty	Reje Qty		Reject Number	Insp. Stamp	
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F140* Brake NC rake NC	,		bend as p	0.00 Per cloud US	ny 5/3	!" Die	•		10				SB (
50 *150* QC quality Control		QC5- Inspect part comple	eteness to step on W/O	0.00 S	S 666				∞					
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NCR:	(Yes)/	No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: Date: 13/06/27 5.

										QA Closed:	Date:	£.
Work Order:	93,	198			DISPOSITION	-			AGAINST DE	PARTMENT	·	
	- <u>646</u>		7/4	2	Rework Scrap & Use-as-is Work Order Update			Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	ł	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root				Descri	ption of work order update		nitial	Ac	tion	Sign &		
Cause	Date	Step	Qty		or Non-conformance		ief Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process	7/2/04	\$ Ho	+32	Drecta	cut along wany grain when on Any Dugs. Desty of 32	8	2012 2012 2012	Scrap + DB on & Reptu Ports cut we Concil GRAIN I	with	5m 2,4	B 6-6	057042 121/2/04
Supplier Training Unapproved					19070 × 5	٨	-	m 12581	o he cut in world cy.	12	32 6	
						AUL	T CATE	GORY FOR Bon	elis	K		
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	Cracks				Broken/Damaged		Inspect	ion Incomplete		Part Incorre	ct	Weld
	Crushed/0	Crimped.			Burrs		Instruct	tions Incomplete/	Unclear	Part Lost/Mi	issing	Wrong Stock Pulled
	Cuffs				Contamination		Mainte	enance		Part Moved		
	Heat Trea	t			Countersink		Mislabe	eled		Positioned V		7
	Inspection	•	Tube		Cut Too Short	-	Misread	t		Power Loss/		Other
	Ripples in				Drill Holes	Ш	Offset			April D	ey's ponot	Red A GATIN Directu
	Torque W			n	Drawing	Ш	1	Calibration		to be cut	n it.	
	Turning S	•		_	Finish	\vdash	ł	Sequence	•			
1	Wave/Tw	ist in Tub	e		Folio		Outside	Dimensions		•		

120

Packaging

Packaging

***IDENTIFY AS PER APICAL MPP-120 BY STAMPING THE P.# AND

0.00

REV***

20v

										DQA:	Date:	
NCR:	Yes / No)			WORK ORDER NON-	CO	NFORM	/ANCE / UP	DATE			1.8
										QA Closed:	Date:	÷
Work Orde	ar:				DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
WOIK OIG	=1.				Rework	7		Skid-tube	Crosstube	1	Water Jet	Engineering
Part I	No.				Scrap	1		Machining	Small Fab	Pro	d. Eng. Coor.	Quality
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NCR 1	No			· · · · · · · · · · · · · · · · · · ·	Work Order Update]		Large Fab	Composite]	Supplier	
Root			1	Descri	ption of work order update	Т	Initial	Ac	tion	Sign &		-
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	Cracks				Broken/Damaged		Inspecti	on Incomplete		Part Incorre	ct	Weld
	Crushe	d/Crimped	-		Burrs		Instructi	ons Incomplete/	'Unclear	Part Lost/M	issing	Wrong Stock Pulled
'	Cuffs				Contamination	Г	Mainte	nance		Part Moved		_
	Heat Tr	eat			Countersink		Mislabe	led		Positioned \	Vrong	
	Inspect	ion Strip in	1 Tube		Cut Too Short		Misread			Power Loss,	'Surge	Other
	Ripples	in Bend			Drill Holes		Offset			_		

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Order ID 93198 Page 4 November-15-12 9:22:01 AM *N900040100* Accept Setup Start 646.3716 Item ID: **Revision ID:** Stop Item Name: Gauge Bracket Start Qty: 20.00 *20* Cust Item ID: **Start Date:** 11/15/12 Required Date: 12/07/12 Customer: Reg'd Oty: 20.00 Reference: Start Run Process Plan: Date: Tooling: Date: Approvals: Stop Date: SPC (Y/N): QC: Date: Accept Reject Reject Insp. Sequence ID/ Operation Set Up/ **Tool ID** Tool # Plan Qty Number Stamp Work Center ID Description Run Hours Code Qty QC21- Final Inspection - Work Order Release 0.00 190 MC 3-06-21 Pl13-06-20 *100* 0.00 QC Memo Quality Control

										DQA:	Date:	<u> </u>
NCR: Y	es / No				WORK ORDER NON-	·CO	NFORN	AANCE / UPD		OA Glassala	Data	,
	· · · · · · · · · · · · · · · · · · ·									QA Closed:	Date:	<u> </u>
Work Orde	ar:				DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
WOIK OIGE					Rework	٦		Skid-tube	Crosstube		Water Jet	Engineering
Part N	No.				Scrap	-	1	Machining	Small Fab	Pro	d. Eng. Coor.	Quality
					Use-as-is	1	Therm	oforming	Finishing	Rec/Sto	re/Packaging	Other
NCR N	No	<u></u>	······································		Work Order Update			Large Fab	Composite		Supplier	
Root				Descri	ption of work order update		Initial	Actio	on	Sign &		
Cause	Date	Step	Qty	(or Non-conformance	Cł	nief Eng	Descrip	otion	Date	Verification	QC Inspector
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		٠,				FAUI	LT CATE	GORY				
Landi	ng Gear				General		-			7		· ·
	Bending				Bend	_	Grain			Ovalized	_	Pressure/Forced
	Centre N	ot Conce	ntric to C)/S	BOM/Route		Hardwai	re		Over/Under	tolerance	Temperature/Cure
	Cracks				Broken/Damaged		Inspection	on Incomplete		Part Incorre	ct	Weld
	Crushed	/Crimped	-		Burrs		Instructi	ons Incomplete/Ur	nclear .	Part Lost/Mi	issing	Wrong Stock Pulled
	Cuffs				Contamination	L	Mainte	nance		Part Moved		
	Heat Tre	at			Countersink	L	Mislabe	led		Positioned V	Vrong	-
	Inspection	n Strip in	Tube		Cut Too Short		Misread			Power Loss/	Surge	Other
	Ripples in	n Bend			Drill Holes		Offset		 -			

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

November-15-12 9:22:00 AM

Work Order ID:

93198

Parent Item:

646.3716

Parent Item Name:

Gauge Bracket

Start Date: 11/15/12

Required Date: 12/07/12

Start Qty: 20.00

Required Qty: 20.00

Comments:

IPP REV:A 12.10.22 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M17-4-S14GA		Purchased	Nọ			110	sf	0.0000	0.0306	0.6442105	, (,	. 1 . 2 . 2	
. 17-4-SS-Sheet-14-Gauge-0	.073 - 0.083						1		*** · ·=-		1812	-11-02	
11		7				i							

12372

M12.12.17 M606176

.080" thick

125812.

Yes	/ No				WORK ORDER NON-	COI	NFORI	MANCE / UPI	DATE	OA Closed:	Date:	al .
er: .					DISPOSITION				_	 	/PROCESS	
No					Rework Scrap Use-as-is Work Order Update			Machining	Crosstube Small Fab Finishing Composite	-	d. Eng. Coor.	Engineering Quality Other
				Descri	ption of work order update		Initial	Act	ion	Sign &		T
	Date	Step	Qty	(or Non-conformance	Ch	ief Eng	Descr	iption	Date	Verification	QC Inspector
									• • .			
					,	AUL	T CATE	GORY			· · · · · · · · · · · · · · · · · · ·	
	Bending Centre No Cracks Crushed/o Cuffs Heat Trea Inspection Ripples in	Crimped. It In Strip in Bend Vaves in E	Tube		Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes Drawing		Inspecti Instruct Mainte Mislabe Misread Offset Out of (on Incomplete ions Incomplete/Unance led I	Jnclear	Part Incorre Part Lost/M Part Moved Positioned \	ct sissing Nrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
	er:	ng Gear Bending Centre No Cracks Crushed/ Cuffs Heat Trea Inspection Ripples in Torque W	Date Step Date Step	Date Step Qty Date Step Qty Date Step Qty Date Step Qty Control Date Step Qty Date Date Step Qty Date Ste	Date Step Qty Date Step Qty Descri Date Step Oty Descri Control Date Step Oty Descri Descri Date Step Oty Descri Date Step	Part Step Qty Description of work order update or Non-conformance Date Step Qty Or Non-conformance	Part	PAULT CATE Ser:	Processing Antiques and the processing and the proc	Part Disposition Skid-tube Crosstube Machining Small Fab Thermoforming Finishing Composite	DISPOSITION Rework Scrap Use-as-is Work Order Update Date Step Qty Or Non-conformance Date Step Qty Or Non	AClosed: Date: DISPOSITION

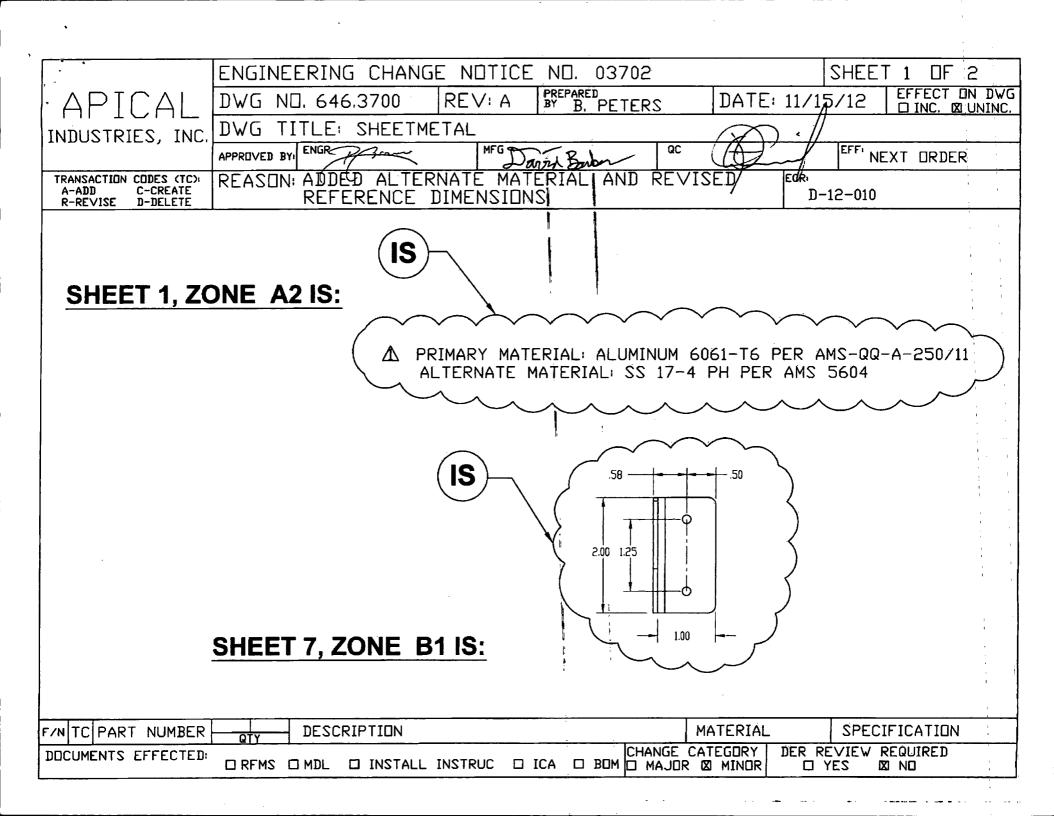
Outside Dimensions

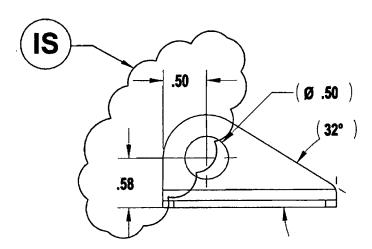
DQA:

Date:

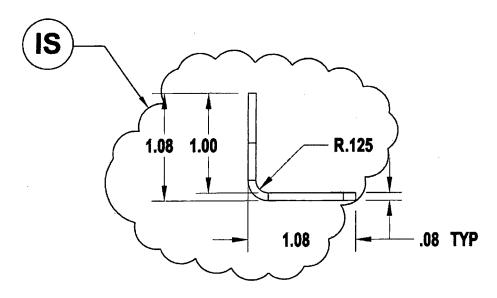
Wave/Twist in Tube

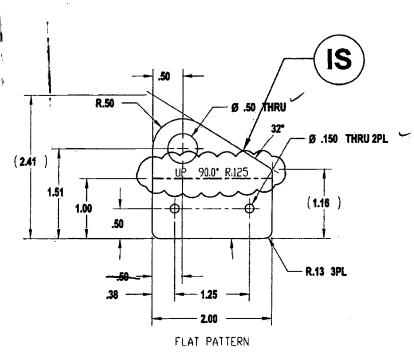
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SHEET 7, ZONE C4 IS:





SHEET 7, ZONE B7 IS:

SHEET 7, ZONE D1 IS:

F/N TC PART NUMBER

QTY

DESCRIPTION

MATERIAL/SPECIFICATION

DART AEROSPACE LTD	Work Order: 93198
Description: Guay Brut	Part Number: 646.3716
Inspection Dwg: 846. 3300 Rev: A	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
\$ 0.120°	+0,005-0.001	0.151"	_		V	JAmoi
Ø 0.500°	40.006-0001		_		V	
0.50"	4-000	0.503"	_		V	
1.51"	t1-0.010"	1.5122	-	,	V	
0.50,	41-0-0109	0.502"	-		V	
O·38"	41-0-010	0.378"	-		V	·
1.25	41-0-010	1,250			V	
2.00"	41-0000	2.001"			V	
1.16"	41-0.004	1.16"			V	
0 080	41-0.00	0.078"	-		٧	
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Measured by: Jm	Audited by:	SMI	Preliminary Approval:	
Date: 13-6-6	Date:	1366	Date:	

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

\$ 10.0E.15



A.T.G. Industries Inc. 731, rue Industrielle Rd. PLATING DEPARTMENT Rockland, On K4K 1T2 Canada

Ph: (613) 446-4544 Fax: (613) 446-4556

Pack List

Number: 62447

Date: 17-Jun-13

To

DART AEROSPACE LTD 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 Canada

Ship To

DART AEROSPACE LTD 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

Ship Via Terms Description Quantity Rev: Part: ASST 1 lot 30 PCS 646.3711 22 PCS 646.3713 30 PCS 646.3716 120110 10 PCS 646.3712 HARD ANODIZE BLACK MIL-A-8625 TYPE III CLASS 2 PRIME MIL-P-23377J TYPE I CLASS N Line: PO: 20116 Job: 20130365 Certificate of Conformance

A.T.G. Industries certifies that all items in this shipment are in conformance with all requirements, specifications and drawings referenced in the purchase order.

> ISO 9001: 2008 REGISTERED ATG SALES-2010 TERMS APPLY

DATE

CERTIFIED SIGNATURE:

RECEIVER SIGNATURE: